

Major Industrial  
Permit No.: MT0000281  
Issued October 30, 2009

## MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

### AUTHORIZATION TO DISCHARGE UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. § 1251 *et seq.*,

#### **Western Sugar Cooperative**

is authorized to discharge from its **sugar beet processing facility**

located at **North ½, Section 10, T 15N, R 26E, Yellowstone County**

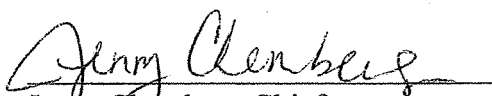
to receiving waters named, **Yegen Drain and Class I Ground Water**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit.

This permit shall become effective: **December 1, 2009.**

This permit and the authorization to discharge shall expire at **midnight, November 30, 2014.**

FOR THE MONTANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY

  
Jenny Chambers, Chief  
Water Protection Bureau  
Permitting & Compliance Division

Modified: December 8, 2009

## TABLE OF CONTENTS

Cover Sheet--Issuance and Expiration Dates

<b>I.</b>	<b>EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS &amp; OTHER CONDITIONS.....</b>	<b>3</b>
A.	Description of Discharge Points and Mixing Zone .....	3
B.	Effluent Limitations .....	4
C.	Monitoring Requirements .....	6
D.	Special Conditions .....	12
E.	Reporting Schedule .....	13
<b>II.</b>	<b>MONITORING, RECORDING AND REPORTING REQUIREMENTS .....</b>	<b>14</b>
A.	Representative Sampling .....	14
B.	Monitoring Procedures .....	14
C.	Penalties for Tampering.....	14
D.	Reporting of Monitoring Results .....	14
E.	Compliance Schedules .....	14
F.	Additional Monitoring by the Permittee .....	15
G.	Records Contents .....	15
H.	Retention of Records .....	15
I.	Twenty-four Hour Notice of Noncompliance Reporting .....	15
J.	Other Noncompliance Reporting .....	16
K.	Inspection and Entry .....	16
<b>III.</b>	<b>COMPLIANCE RESPONSIBILITIES.....</b>	<b>18</b>
A.	Duty to Comply .....	18
B.	Penalties for Violations of Permit Conditions .....	18
C.	Need to Halt or Reduce Activity not a Defense .....	18
D.	Duty to Mitigate.....	18
E.	Proper Operation and Maintenance .....	18
F.	Removed Substances .....	19
G.	Bypass of Treatment Facilities.....	19
H.	Upset Conditions .....	20
I.	Toxic Pollutants .....	20
J.	Changes in Discharge of Toxic Substances .....	20
<b>IV.</b>	<b>GENERAL REQUIREMENTS .....</b>	<b>22</b>
A.	Planned Changes .....	22
B.	Anticipated Noncompliance.....	22
C.	Permit Actions .....	22
D.	Duty to Reapply .....	22
E.	Duty to Provide Information .....	22
F.	Other Information .....	22
G.	Signatory Requirements.....	22
H.	Penalties for Falsification of Reports.....	23
I.	Availability of Reports.....	24
J.	Oil and Hazardous Substance Liability .....	24
K.	Property or Water Rights .....	24
L.	Severability .....	24
M.	Transfers .....	24
N.	Fees .....	25
O.	Reopener Provisions .....	25
<b>V.</b>	<b>DEFINITIONS .....</b>	<b>27</b>

I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS

A. Description of Discharge Points and Mixing Zone

The authorization to discharge provided under this permit is limited to those outfalls specially designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Section 75-5-632 of the Montana Water Quality Act.

<u>Outfall</u>	<u>Description</u>
001	<p><b>Location:</b> At the end of the pipe, discharging into the Yegen Drain, located at 45° 45' 57" N latitude, 108° 29' 40" W longitude.</p> <p><b>Mixing Zone:</b> No mixing zone is granted</p> <p><b>Treatment Works:</b> primary settling and aeration</p>
002	<p><b>Location:</b> At the end of the pipe, discharging into the City of Billings' State Avenue storm drainage system, located at 45° 46' 10" N latitude, 108° 29' 52" W longitude.</p> <p><b>Mixing Zone:</b> No mixing zone is granted</p> <p><b>Treatment Works:</b> primary settling</p>
004	<p><b>Location:</b> Infiltration from various unlined wastewater factory ponds, discharging into Class I ground water, 45° 45' 56" N latitude, 108° 29' 57" W longitude.</p> <p><b>Mixing Zone:</b> The maximum extent of the mixing zone in the named receiving water is as follows: 1,000 feet downstream and 1,357 feet wide at the downgradient extent for total ammonia as nitrogen and specific conductance.</p> <p><b>Treatment Works:</b> primary settling.</p>

B. Effluent Limitations

**Outfall 001 and 002 – Final Limitations**

Effective September 1, 2014 and lasting through the term of the permit, the quality of effluent discharged by the facility shall, as a minimum, meet the limitations as set forth below:

<b>Outfall 001 and 002 Final Effluent Limitations Effective September 1, 2014</b>			
Parameter	Units	Average Monthly Limit <sup>1</sup>	Maximum Daily Limit <sup>1</sup>
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	30	45
Total Suspended Solids (TSS)	lb/day	2,640	3,960
Fecal Coliform Bacteria <sup>2</sup>	MPN/100mL	---	400
<i>E. coli</i> Bacteria, non-campaign <sup>3</sup>	cfu/100 mL	126	---
Temperature	F	---	77.0
Total Residual Chlorine (TRC)	mg/L	0.011	0.019
Total Ammonia as N	mg/L	2.80	7.08
Nitrate plus Nitrite as N	mg/L	---	10.0
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. This limitation applies year round. 3. This limitation applies from April 1 through October 31. 4. Report Geometric Mean if more than one sample is collected in the reporting period.			

Effluent pH shall remain between 6.0 and 9.0 standard units (s.u.). For compliance purposes, any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.

The instantaneous maximum limitation for oil & grease in any grab sample shall not exceed 10 mg/L.

There shall be no discharge which causes visible oil sheen in the receiving stream.

There shall be no acute toxicity in the effluent discharged by the facility.

### Outfalls 001 and 002 – Interim Limitations

Beginning on the effective date of this permit and lasting through midnight, August 31, 2014, the quality of effluent discharged by the facility shall, as a minimum, meet the limitations as set forth below:

Outfalls 001 and 002 Interim Effluent Limitations			
Parameter	Units	Average Monthly Limit <sup>1</sup>	Maximum Daily Limit <sup>1</sup>
Biochemical Oxygen Demand (BOD <sub>5</sub> )	lb/day	2,640	3,960
Total Suspended Solids (TSS)	lb/day	2,640	3,960
Temperature	°F	---	77.0
Total Residual Chlorine (TRC)	mg/L	---	0.15
Footnotes:			
1. See Definition section at end of permit for explanation of terms.			

Effluent pH shall remain between 6.0 and 9.0 s.u.. For compliance purposes, any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.

The instantaneous maximum limitation for oil & grease in any grab sample shall not exceed 10 mg/L.

There shall be no discharge which causes visible oil sheen in the receiving stream.

There shall be no acute toxicity in the effluent discharged by the facility.

#### **Outfall 004 – Final Limitations**

Effective September 1, 2014 and lasting through the term of the permit, the quality of the ground water, measured at the compliance point established as monitoring well MW-9, shall, at a minimum, meet the limitations as set forth below:

<b>Outfall 004 Limitations</b>		
Parameter	Units	Maximum Daily Limit <sup>1</sup>
Total Ammonia as N	mg/L	35.0
Specific Conductivity (SC)	μS/cm	2,500
Footnotes: 1. See Definition section at end of permit for explanation of terms.		

#### **C. Monitoring Requirements**

##### **Outfalls 001 and 002**

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharges. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report Form (EPA No. 3320-1) that no discharge or overflow occurred.

Outfalls 001 and Outfall 002 Monitoring Requirements				
Parameter	Unit	Sample Frequency	Sample Type <sup>1</sup>	RRV <sup>2</sup>
Discharge <sup>3</sup>	gpd	Continuous	Instantaneous	---
BOD <sub>5</sub>	mg/L	Daily	Composite	---
TSS	mg/L	Daily	Composite	---
pH	s.u.	Daily	Instantaneous	---
Temperature	F°	Daily	Instantaneous	---
Total Residual Chlorine	mg/L	Daily	Grab	---
Fecal coliform bacteria	MPN/ 100 mL	1/Week	Grab	1
<i>E. coli</i> bacteria <sup>4</sup>	cfu/100 mL	1/Week	Grab	1
Total Ammonia as N	mg/L	1/Week	Composite	0.05
Total Kjeldahl Nitrogen	mg/L	1/Week	Composite	1.0
Nitrate + Nitrite as N	mg/L	1/Week	Composite	0.01
Total Phosphorus as P	mg/L	1/Month	Composite	---
Arsenic, total recoverable	µg/L	1/Year <sup>6</sup>	Composite	3
Iron, total recoverable	µg/L	1/Year <sup>6</sup>	Composite	50
Lead, total recoverable	µg/L	1/Year <sup>6</sup>	Composite	0.5
Mercury, total recoverable	µg/L	1/Year <sup>6</sup>	Composite	0.01
Selenium, total recoverable	µg/L	1/Year <sup>6</sup>	Composite	1.0
Total Dissolved Solids	mg/L	1/Month	Composite	---
Total Hardness (as CaCO <sub>3</sub> )	mg/L	1/Month	Composite	10.0
Whole Effluent Toxicity, Acute <sup>5</sup>	% Effluent	1/Quarter	Composite	---
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. The Required Reporting Value (RRV) is the detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the Department. The RRV is the Department's best determination of a level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories using EPA approved methods or methods approved by the Department. 3. Requires recording device or totalizer; permittee shall report daily maximum and daily average flow on DMR. 4. Effluent monitoring for <i>E. coli</i> bacteria is only required during the summer season, as defined by the standard (April 1 through October 31). 5. See narrative discussion in permit for additional details. 6. Sample is required to be collected during the 4 <sup>th</sup> calendar quarter of the year to represent the period of campaign.				

1. Whole Effluent Toxicity Monitoring – Acute Toxicity

Starting in the first calendar quarter following the effective date of the permit, the permittee shall, at least once each quarter conduct an acute static replacement toxicity test on a composite sample of the effluent. Testing will employ two species per quarter and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of the receiving water.

The static toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms, EPA-600/4-90/027 and the “Region VIII EPA NPDES Acute Test Conditions-State Renewal Whole Effluent Toxicity”. The permittee shall conduct an acute 48-hour static renewal toxicity test using *Ceriodaphnia dubia* and an acute 96-hour static renewal toxicity test using fathead minnows (*Pimephales promelas*). The control of pH in the toxicity test utilizing CO2 enriched atmospheres is allowed to prevent rising pH drift. The target pH selected must represent the pH value of the receiving water at the time of sample collection.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the Department. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Part II of this permit.

The quarterly results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) form submitted for the end of the reporting calendar quarter (e.g., whole effluent results for the reporting quarter ending March 31 shall be reported with the March DMR due April 28th with the remaining quarterly reports submitted with the June, September, and December DMR's). The format for the laboratory report shall be consistent with the latest revision of Region VIII Guidance for Acute Whole Effluent Reporting, and shall include all chemical and physical data as specified.



If the results for four consecutive quarters of testing indicate no acute toxicity, the permittee may request a reduction to quarterly acute toxicity testing on only one species on an alternating basis. The Department may approve or deny the request based on the results and other available information without an additional public notice. If the request is approved, the test procedures are to be the same as specified above for the test species.

### PCC Ponds as Monitored at MW-9

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge.

Monitoring Requirements – Monitoring Well MW-9				
Parameter	Unit	Sample Frequency	Sample Type <sup>1</sup>	RRV <sup>2</sup>
Static water level	Feet	1/Month <sup>3,4</sup>	Instantaneous	---
Water temperature	° C	1/Month <sup>3,4</sup>	Instantaneous	---
pH	s.u.	1/Month <sup>3,4</sup>	Instantaneous	---
Specific Conductivity	µS/cm	1/Month <sup>3,4</sup>	Instantaneous	---
Oxidation-Reduction Potential	milliVolts (mV)	1/Month <sup>3,4</sup>	Instantaneous	---
Total Ammonia as N	mg/L	1/Month <sup>3,4</sup>	Grab	0.05
Total Kjeldahl Nitrogen	mg/L	1/Quarter	Grab	---
Iron, Dissolved <sup>5</sup>	µg/L	1/Quarter	Grab	50
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. The Required Reporting Value (RRV) is the detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the Department. The RRV is the Department's best determination of a level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories using EPA approved methods or methods approved by the Department. 3. Monitoring is monthly during the campaign which is defined as October 1 through March 28. 4. Monitoring is quarterly during the 2 <sup>nd</sup> and 3 <sup>rd</sup> calendar quarters, representative of the inter-campaign. 5. Sample filtration through a 0.045 µm membrane filter (Circular DEQ-7, February 2008).				

## Ground Water Monitoring

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge.

Monitoring Requirements Monitoring Wells MW-2, -8, -12A, OBS-1, Harbaugh, and Antille				
Parameter	Unit	Sample Frequency	Sample Type <sup>1</sup>	RRV <sup>2</sup>
Static water level	Feet	1/Quarter	Instantaneous	---
Water temperature	° C	1/Quarter	Instantaneous	---
pH	s.u.	1/Quarter	Instantaneous	---
Specific Conductivity	µS/cm	1/Quarter	Instantaneous	---
Oxidation-Reduction Potential	milliVolts (mV)	1/Quarter	Instantaneous	---
Total Ammonia as N	mg/L	1/Quarter	Grab	0.05
Total Kjeldahl Nitrogen	mg/L	1/Quarter	Grab	---
Iron, dissolved <sup>3</sup>	µg/L	1/Quarter	Grab	50
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. The Required Reporting Value (RRV) is the detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the Department. The RRV is the Department's best determination of a level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories using EPA approved methods or methods approved by the Department. 3. Sample filtration through a 0.045 µm membrane filter (Circular DEQ-7, February 2006).				

<b>Monitoring Requirements – Monitoring Wells MW-3, -4, -5, and -6</b>				
Parameter	Unit	Sample Frequency	Sample Type <sup>1</sup>	RRV <sup>2</sup>
Static water level	Feet	1/Quarter	Instantaneous	---
Water temperature	° C	1/Quarter	Instantaneous	---
pH	s.u.	1/Quarter	Instantaneous	---
Specific Conductivity	µS/cm	1/Quarter	Instantaneous	---
Oxidation-Reduction Potential	milliVolts (mV)	1/Quarter	Instantaneous	---
Total Ammonia	µg/L	1/Quarter	Grab	0.05
Total Kjeldahl Nitrogen	µg/L	1/Quarter	Grab	---
Arsenic, dissolved <sup>3</sup>	µg/L	1/Year <sup>4</sup>	Grab	3
Iron, dissolved <sup>3</sup>	µg/L	1/Quarter	Grab	50
Lead, dissolved <sup>3</sup>	µg/L	1/Year <sup>4</sup>	Grab	0.5
Mercury, dissolved <sup>3</sup>	µg/L	1/Year <sup>4</sup>	Grab	0.01
Selenium, dissolved <sup>3</sup>	µg/L	1/Year <sup>4</sup>	Grab	1
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. The Required Reporting Value (RRV) is the detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the Department. The RRV is the Department's best determination of a level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories using EPA approved methods or methods approved by the Department. 3. Sample filtration through a 0.045 µm membrane filter (Circular DEQ-7, February 2006). 4. Annual samples shall be collected in the first calendar quarter of each year.				

<b>Monitoring Requirements – Monitoring wells Energy Labs and Ronquillo</b>				
Parameter	Unit	Sample Frequency	Sample Type <sup>1</sup>	RRV <sup>2</sup>
Static water level	Feet	1/Year <sup>3</sup>	Instantaneous	---
Water temperature	° C	1/Year <sup>3</sup>	Instantaneous	---
pH	s.u.	1/Year <sup>3</sup>	Instantaneous	---
Specific Conductivity	µS/cm	1/Year <sup>3</sup>	Instantaneous	---
Oxidation-Reduction Potential	milliVolts (mV)	1/Year <sup>3</sup>	Instantaneous	---
Total Ammonia	mg/L	1/Year <sup>3</sup>	Grab	0.05
Total Kjeldahl Nitrogen	mg/L	1/Year <sup>3</sup>	Grab	---
Iron, dissolved <sup>4</sup>	µg/L	1/Year <sup>3</sup>	Grab	50
Footnotes: 1. See Definition section at end of permit for explanation of terms. 2. The Required Reporting Value (RRV) is the detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the Department. The RRV is the Department's best determination of a level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories using EPA approved methods or methods approved by the Department. 3. Samples shall be collected in August of each year. 4. Sample filtration through a 0.045 µm membrane filter (Circular DEQ-7, February 2006).				

D. Special Conditions

1. Toxicity Reduction Evaluation / Toxicity Identification Evaluation

Should acute toxicity be detected in the required resample, a TIE-TRE shall be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity. Failure to initiate or conduct an adequate TIE-TRE, or delays in the conduct of such tests, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in Part I.B of this permit. A TRE plan needs to be submitted to the Department within 45 days after confirmation of the continuance of effluent toxicity (resample).

2. Other

The following conditions must be met by the given timeframes:

Permit Condition	Timeframe/Due Date
Submit written report detailing how final pH TBEL will be met at Outfall 002.	September 1, 2010
Submit written annual progress reports detailing milestones accomplished and steps planned for meeting final pH TBEL at Outfall 002.  Submit detailed annual written reports that states the milestones accomplished and steps planned for the upcoming year towards reaching compliance with final surface water WQBEL.  Submit detailed annual written report that states the milestones accomplished and steps planned for the upcoming year towards reaching compliance with final ground water limits and conditions.	September 1, 2011, 2012, 2013
Submit final reports including design information and processes implemented that will consistently meet the final effluent limits contained in the permit.	March 1, 2014

E. Reporting Schedule

The following table is a summary of reporting requirements stated in this part (Part I) of the permit. Refer to the specific permit section for additional submittal requirements, specific information, and/or deliverable details.

Submittal Date <sup>1</sup>	Frequency	Required Item	Permit Section
28 <sup>th</sup> day of the month following each completed monitoring period	1/Month	<ul style="list-style-type: none"> <li>• Effluent Monitoring – Outfall 001 and 002</li> <li>• Compliance Monitoring - PCC ponds as monitored at MW-9</li> </ul>	Part I.C
	1/Quarter	<ul style="list-style-type: none"> <li>• Ground Water Monitoring – MW-2, -8, -12A, OBS-1, Harbaugh, and Antille</li> <li>• Ground Water Monitoring – MW-3, -4, -5, -6</li> </ul>	Part I.C
	1/Year	Ground Water Monitoring – Monitoring Wells Energy Labs and Ronquillo	Part I.C
September 1, 2010	Single Event	<ul style="list-style-type: none"> <li>• Report for Outfall 002 pH TBEL</li> </ul>	Part I.D.2
September 1, 2011 <sup>2</sup>	Annual Event <sup>2</sup>	<ul style="list-style-type: none"> <li>• Annual progress report for Outfall 002 pH TBEL</li> <li>• Annual progress report for meeting final surface water WQBEL</li> <li>• Annual progress report for meeting final ground water limits and conditions</li> </ul>	Part I.D.2
March 1, 2014	Single Event	Report detailing final design and treatment process(es) implemented to consistently meet final effluent limitations.	Part I.D.2
<p>1. Specific dates shown are for Special Conditions and/or Compliance Schedule Items.</p> <p>2. The date shown is specific to the initial required annual report; subsequent annual reports are due by September 1 of 2012 and 2013.</p>			

## II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

### A. Representative Sampling

Samples taken in compliance with the monitoring requirements established under Part I of the permit shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

### B. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit. All flow-measuring and flow-recording devices used in obtaining data submitted in self-monitoring reports must indicate values within 10 percent of the actual flow being measured.

### C. Penalties for Tampering

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six months, or by both.

### D. Reporting of Monitoring Results

Self-Monitoring results will be reported monthly. Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. Whole effluent toxicity (biomonitoring) results must be reported on forms from the most recent version of EPA Region VIII's "Guidance for Whole Effluent Reporting" with copies of the laboratory analysis report. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the "Signatory Requirements" (see Part IV.G of this permit), and submitted to the Department and the Regional Administrator at the following addresses:

- |   |  |
|---|--|
| (a) Montana Department of Environmental<br>Quality<br>Water Protection Bureau<br>PO Box 200901<br>Helena, Montana 59620-0901<br>Phone: (406) 444-3080 | (b) U.S. Environmental Protection<br>Agency<br>301 South Park Avenue<br>Drawer 10096<br>Helena, Montana 59626<br>Phone: (406) 441-1123 |
|---|--|

### E. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

G. Records Contents

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The initials or name(s) of the individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The time analyses were initiated;
5. The initials or name(s) of individual(s) who performed the analyses;
6. References and written procedures, when available, for the analytical techniques or methods used; and
7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

H. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any serious incidents of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:

- a. Any noncompliance which may seriously endanger health or the environment;
  - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or
  - c. Any upset which exceeds any effluent limitation in the permit (see Part III.H of this permit, "Upset Conditions").
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
    - a. a description of the noncompliance and its cause;
    - b. the period of noncompliance, including exact dates and times;
    - c. the estimated time noncompliance is expected to continue if it has not been corrected; and
    - d. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  3. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080.
  4. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results".

J. Other Noncompliance Reporting

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D of this permit are submitted. The reports shall contain the information listed in Part II.I.2 of this permit.

K. Inspection and Entry

The permittee shall allow the head of the Department or the Director, or an authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;



3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

### III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department or the Regional Administrator advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than 2 years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2 and III.G.3 of this permit.
2. Notice:
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
  - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".
3. Prohibition of bypass:
  - a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
    - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - 3) The permittee submitted notices as required under Part III.G.2 of this permit.
  - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III.H.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e. Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required under Part II.I of this permit, "Twenty-four Hour Notice of Noncompliance Reporting"; and
  - d. The permittee complied with any remedial measures required under Part III.D of this permit, "Duty to Mitigate".
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

J. Changes in Discharge of Toxic Substances

Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - a. One hundred micrograms per liter (100 mg/L);

- b. Two hundred micrograms per liter (200 mg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 mg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - d. The level established by the Department in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- a. Five hundred micrograms per liter (500 mg/L);
  - b. One milligram per liter (1 mg/L) for antimony;
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - d. The level established by the Department in accordance with 40 CFR 122.44(f).

#### IV. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for revoking, modifying and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

G. Signatory Requirements

All applications, reports or information submitted to the Department or the EPA shall be signed and certified.

1. All permit applications shall be signed as follows:

a. For a corporation: by a responsible corporate officer;

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
  - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
- a. The authorization is made in writing by a person described above and submitted to the Department; and
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)
3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document

submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property or Water Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;
3. The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2 of this permit; and
4. Required annual and application fees have been paid.



N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose an additional assessment consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-31-510(3), MCA, or
2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
2. Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the department may modify the effluent limits or water management plan.
3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.
4. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.
5. Toxic Pollutants: A toxic standard or prohibition is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.
6. Toxicity Limitation: Change in the whole effluent protocol, or any other conditions related to the control of toxicants have taken place, or if one or more of the following events have occurred:

- a. Toxicity was detected late in the life of the permit near or past the deadline for compliance.
- b. The TRE/TIE results indicated that compliance with the toxic limits will require an implementation schedule past the date for compliance.
- c. The TRE/TIE results indicated that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits.
- d. Following the implementation of numerical controls on toxicants, a modified whole effluent protocol is needed to compensate for those toxicants that are controlled numerically.
- e. The TRE/TIE revealed other unique conditions or characteristics which, in the opinion of the Department, justify the incorporation of unanticipated special conditions in the permit.

V. DEFINITIONS

1. **"Act"** means the Montana Water Quality Act, Title 75, chapter 5, MCA.
2. **"Administrator"** means the administrator of the United States Environmental Protection Agency.
3. **"Acute Toxicity"** occurs when 50 percent or more mortality is observed for either species (See Part I.C of this permit) at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.
4. **"Arithmetic Mean" or "Arithmetic Average"** for any set of related values means the summation of the individual values divided by the number of individual values.
5. **"Average Monthly Limitation"** means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
6. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility.
7. **"Chronic Toxicity"** means when the survival, growth, or reproduction, as applicable, for either test species, at the effluent dilution(s) designated in this permit (see Part I.C.), is significantly less (at the 95 percent confidence level) than that observed for the control specimens.
8. **"Composite samples"** shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
  - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
  - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
  - c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow); and,
  - d. Continuous collection of sample, with sample collection rate proportional to flow rate.

9. **"Daily Discharge"** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.
10. **"Daily Maximum Limit"** means the maximum allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.
11. **"Department"** means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.
12. **"Director"** means the Director of the Montana Department of Environmental Quality.
13. **"Discharge"** means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including ground water.
14. **"EPA"** means the United States Environmental Protection Agency.
15. **"Federal Clean Water Act"** means the federal legislation at 33 USC 1251, *et seq.*
16. **"Grab Sample"** means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.
17. **"Instantaneous Maximum Limit"** means the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.
18. **"Instantaneous Measurement"**, for monitoring requirements, means a single reading, observation, or measurement.
19. **"Minimum Level"** (ML) of quantitation means the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte, as determined by the procedure set forth at 40 CFR 136. In most cases the ML is equivalent to the Required Reporting Value (RRV) unless otherwise specified in the permit. (ARM 17.30.702(22))
19. **"Mixing zone"** means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.

20. **"Nondegradation"** means the prevention of a significant change in water quality that lowers the quality of high-quality water for one or more parameters. Also, the prohibition of any increase in discharge that exceeds the limits established under or determined from a permit or approval issued by the Department prior to April 29, 1993.
21. **"Regional Administrator"** means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.
22. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
23. **"TIE"** means a toxicity identification evaluation.
24. **"TMDL"** means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.
25. **"TRE"** means a toxicity reduction evaluation.
26. **"TSS"** means the pollutant parameter total suspended solids.
27. **"Upset"** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.